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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,389	04/26/2001	Conrad A. Maxwell	00CON152P-CIP	9951
25700	7590	06/29/2004	EXAMINER	
FARJAMI & FARJAMI LLP 26522 LA ALAMEDA AVENUE, SUITE 360 MISSION VIEJO, CA 92691			BUTLER, DENNIS	
			ART UNIT	PAPER NUMBER
			2115	

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/843,389

**Applicant(s)**MAXWELL, CONRAD A. **Examiner**

Dennis M. Butler

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 22 is/are rejected.
- 7) ☒ Claim(s) 17-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

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**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. This action is in response to the application filed on April 26, 2001. Claims 1-22 are pending.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-9 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "said communication bus" in line 10 lacks proper antecedent basis.

Claims 2-9 are rejected because they incorporate the deficiencies of claim 1.

Regarding claim 15, the phrases "said at least one output data signal", "said at least two said communications devices", "said at least one data slot" and "said at least two communications devices" lack proper antecedent basis.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 10-14, 16 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis et al., U. S. Patent 5,754,764.

Per claim 1:

A) Davis et al teach the following claimed items:

1. at least two communication devices having a differential encoder with the host systems coupled to the Ethernet LAN at column 2, lines 2-9;
2. an integrated packet bus having three or more input data signals (Ethernet, Serial and Parallel data inputs), one input designated for carrying differentially encoded data (Ethernet data input) with figure 1A;
3. a controller communicating data with each device and having a differential decoder with Controller 6 and ENDEC 4B of figure 1A;
4. a differential encoder encoding a portion of data for transmission over the input data signal designated for carrying differentially encoded data with ENDEC 4B of figure 1A, with figure 3-22 and at column 61, lines 31-67.

Per claim 10:

A) Davis et al teach the following claimed items:

1. A receive clock signal (RXC) and a transmit clock signal (TXC) with figure 3-16, at column 56, lines 58-60 and at column 57, lines 20-22;
2. a receive frame signal and a transmit frame signal with figure 3-26 and at column 62, line 65 – column 63, line 10;

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3. at least two output data signals with the Ethernet, Serial and Parallel output data signals of figure 1A;
4. at least three input data signals with the Ethernet, Serial and Parallel input data signals of figure 1A;
5. two input data signals not designated for carrying differentially encoded data with the Serial and Parallel input data signals of figure 1A;
6. one input data signal designated for carrying differentially encoded data with the Ethernet input data signal.

Per claims 11-14:

Davis describes that the Ethernet (differential) input signal is clocked at 10 Mhz while the serial inputs are clocked at 1.8461 Mhz or less. Davis describes the claimed combinations of input and output data signals with the input and output data signals shown in figure 1A.

Per claims 16 and 22:

A) Davis et al teach the following claimed items:

1. one input data signal designated for carrying differentially encoded data (Ethernet data input) with figure 1A;
2. two input data signals not designated for carrying differentially encoded data with the Serial and Parallel input data signals of figure 1A;
3. encoding, transmitting and receiving a first portion of data on the input data signal designated for carrying differentially encoded data (Ethernet data

- input) with LAN 5 and ENDEC 4B of figure 1A, with figure 3-22, at column 2, lines 2-9 and at column 61, lines 31-67;
4. transmitting and receiving a second portion of the data on the two input data signals not designated for carrying differentially encoded data with the Serial input data signals of figure 1A and at column 125, lines 42-57;
5. decoding the first portion of data using differential encoding technique with ENDEC 4B of figure 1A, with figure 3-22, and at column 61, lines 31-67.
7. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al., U. S. Patent 5,754,764.

Per claims 6-9:

Davis teaches the items of claim 1 as described above. Davis does not explicitly teach the elements of claims 6-9 as claimed. Regarding the communications devices, Davis describes including a local area network (LAN) that uses an Ethernet controller with LAN 5 and Ethernet 6 of figure 1A. In addition, Davis describes that several host systems can be coupled to the LAN at column 2, lines 2-9. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to connect LAN, DSL and other broadband devices to the LAN and Ethernet controller in order to allow for communication with other host systems. Regarding coupling the pull up to each input data signal, Davis describes coupling pull down resistors at column 62, lines 3-5. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made that the pull down configuration could be replaced with an

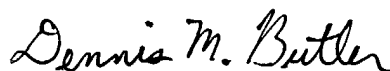
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equivalent pull up configuration because both configurations are well known in the art. Regarding the controller performing a handshake with the bus, Davis describes that Ethernet controller processes Ethernet packets including differentially encoded data packets at column 24, lines 32-67. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the controller perform a handshake with the bus in order to identify and process input data signals carrying differentially encoded data.

9. Claims 17-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis M. Butler whose telephone number is 703-305-9663. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Dennis M. Butler  
Primary Examiner  
Art Unit 2115